

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013694**Date Inspected:** 18-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG COMPONENT				

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

**Ultrasonic Testing (A,B,C and D-Scan )**

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as portion Deck plate to Edge plate Corner joint of segment 11EW. This Inspection was performed after ABF UT Inspectors performed UT of this joint. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure that Caltrans QA and ABF QA have jointly filled out on this date.

The Weld Designation is as follows

CA091-004

**Ultrasonic Testing (UT) for CB8**

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as CB8 .

The Weld Designations are as follows

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

FB204-017-059,060,063,064,025,028,031,034  
FB204-018-065,066,069,070,037,040,043,046  
FB204-019-049,050,053,057  
FB205-018-031,032,035,036,039,040,013,016,019,022  
FB205-020-031,032,035,036,039,040,013,016,019,022  
FB205-019-025,026,029,030  
CB202B-008-001,002,003,004  
CB202C-008-002

During Quality Assurance random in-process observations of the assembly of Orthotropic Box Girder (OBG) segments 12AW, 12BW, 12CW, 12AE and 12BE, this Quality Assurance Inspector (QA) discovered the following issues that the ZPMC has deviated from the approved weld joint design without the Engineers approval. ZPMC has changed the bevel of Complete Joint Penetration (CJP) "T" joint, that joins the Longitudinal Diaphragm (LD) to Bottom Plate (BP). According to the Drawing WD 12 the bevel should be at BP side and not the Side Plate (SP) side.

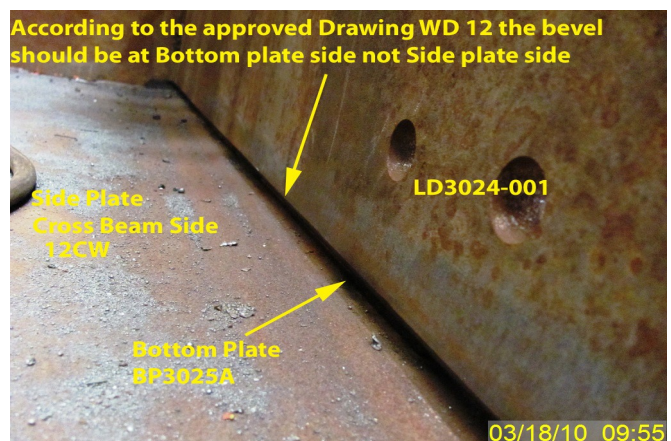
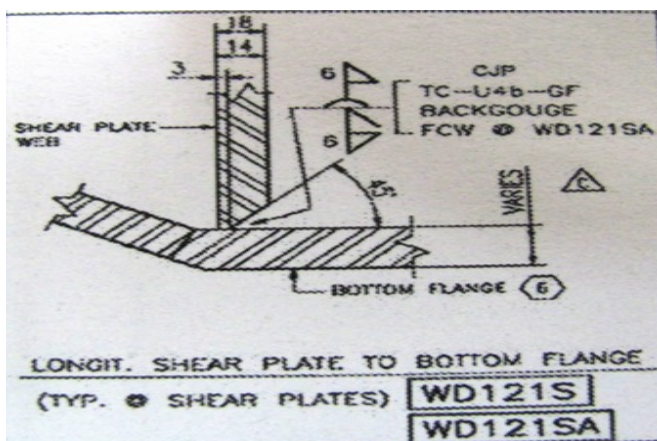
The welds affected are identified as:

- 1) SEG3004X-46, 49, 50, located at LD3019-001 to BP3019A for segment 12AW Counter Weight (CW) side.
- 2) SEG3005K-18, 46, 73, 89, located at LD3021-001 to BP3022A for segment 12BW CW side.
- 3) SEG3005M-18, 46, 73, 89, located at LD3022-001 to BP3024A for segment 12BW Cross Beam (CB) side.
- 4) SEG3006T-56, 41, 38, located at LD3024-001 to BP3025A for segment 12CW CB side.
- 5) SEG3006S-56, 41, 38, located at LD3023-001 to BP3027A for segment 12CW CW side.
- 6) LD3008-001 to BP3003A for segment 12AE Bike Path (BP) side.
- 7) LD3010-001 to BP3006A for segment 12BE BP side.

OBG Segment 12AW, 12BW, 12CW, 12AE and 12BE are located in Bay 14.

This QA Inspector generated an incident report for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

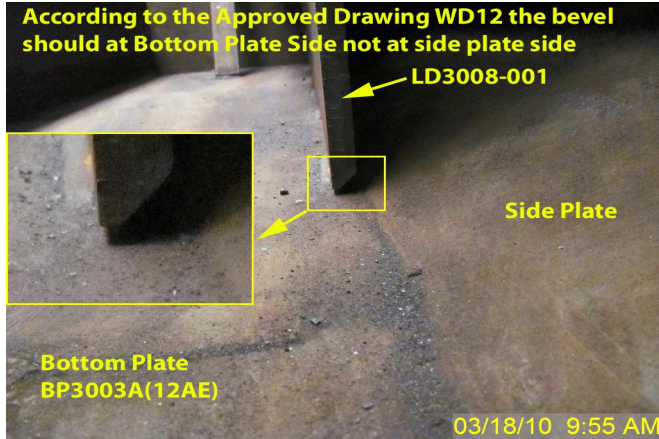


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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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### Summary of Conversations:

No relevant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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